

# Patent [19]

[11] Patent Number: 09192496

[45] Date of Patent: Jul. 29, 1997

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## [54] PHOTOCATALYST AND SELF-CLEANING ARTICLES HAVING THE SAME

[21] Appl. No.: 08003960 JP08003960 JP

[22] Filed: Jan. 12, 1996

[51] Int. Cl.<sup>6</sup> B01J03502; A61L00920; B01J02116; B01J02322; B01J02326; B01J02334; B01J02370; B01J023745; B01J02380; B01J02385; B01J027224

## [57] ABSTRACT

**PROBLEM TO BE SOLVED:** To provide a photocatalyst which enhances the utilization efficiently of visible light and photocatalyst activity and self-cleaning articles which have this photocatalyst and are utilized for purification of living spaces.

**SOLUTION:** This photocatalyst is formed by doping at least one kind selected from a group consisting of a vanadium, chromium, manganese, iron, cobalt, nickel and copper to at least one kind selected from a group consisting of titanium oxide, zinc oxide, strontium titanate, tungsten oxide and silicon carbide. The doping quantity of the dopants described above is 500ppb to 500ppm of the total quantity of the photocatalyst. The self-cleaning articles have such photocatalyst and are illumination appliances, gas burner hoods, kitchen goods, toilet goods, bathroom goods, cabinets, building materials, bedding, curtains, carpets, household electrical products, cooking appliances, dinnerware, automobiles, bicycles, personal effects, clothing, septic equipment, water tanks or articles for animals. These articles themselves or the surfaces of these part or the inside surfaces thereof have the photocatalysts described above.

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